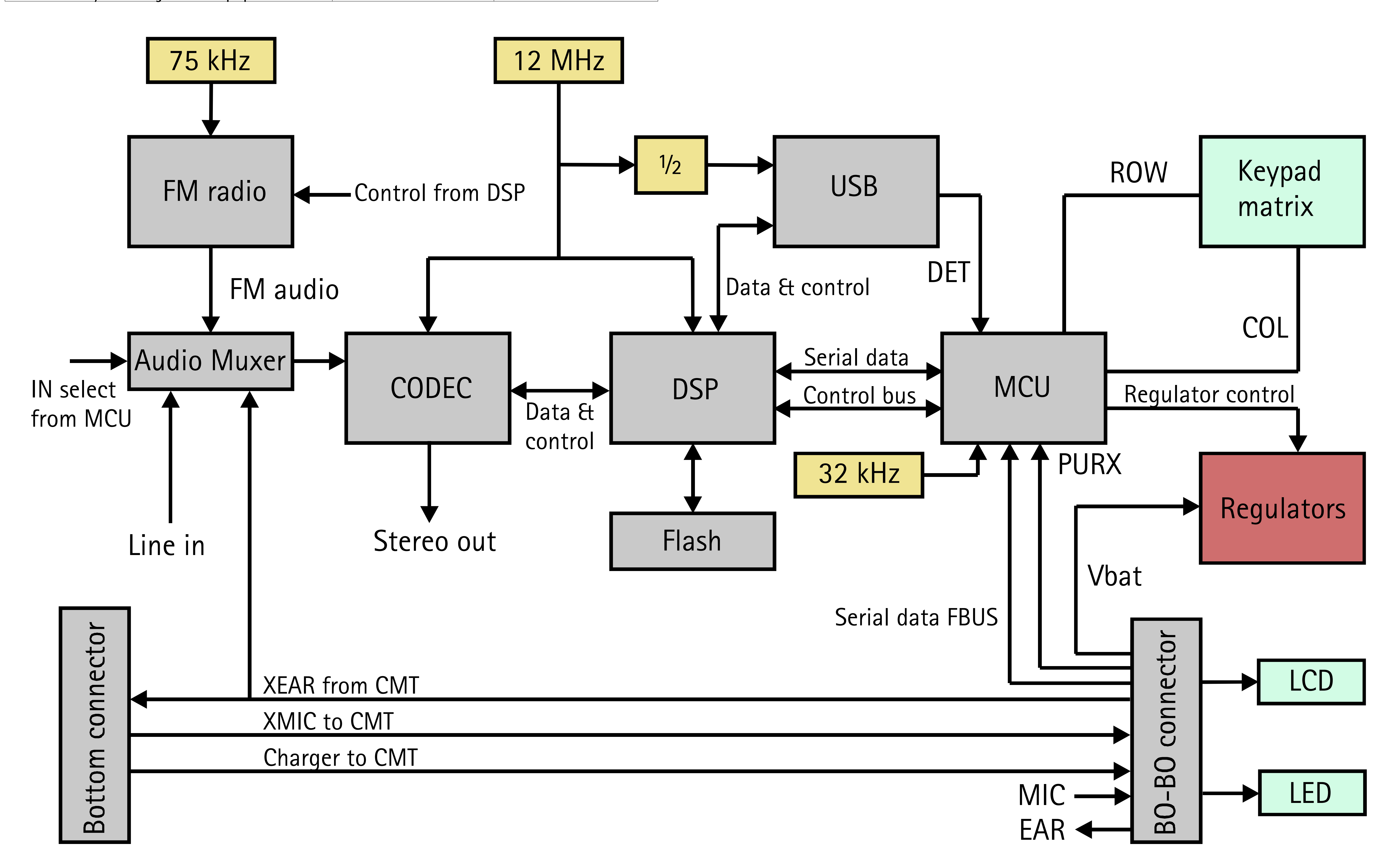
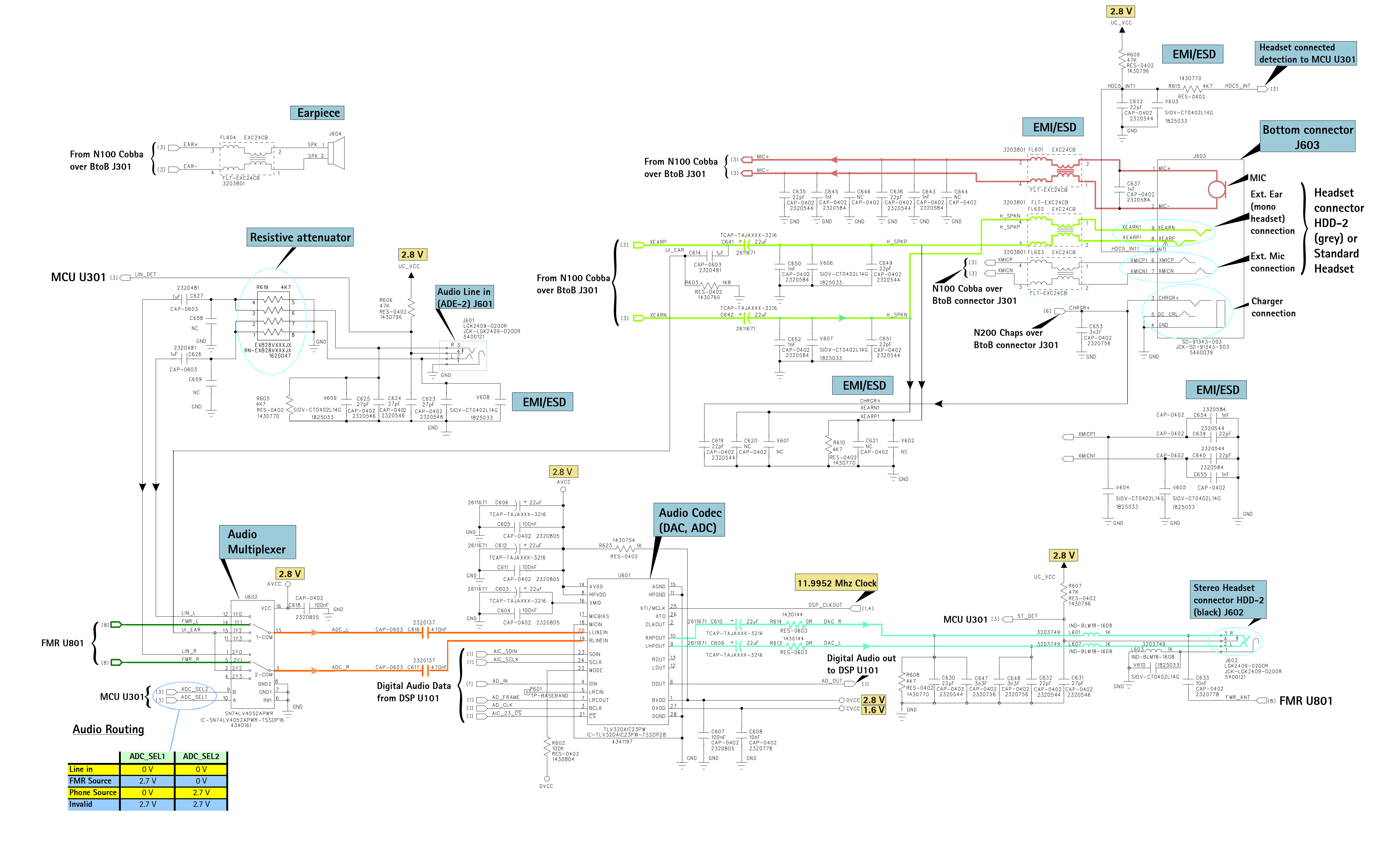


75 kHz
12 MHz
FM radio
Control from DSP
½
USB
ROW
Keypad matrix
DET
Data & control
FM audio
COL
Audio Muxer
CODEC
DSP
Serial data
MCU
Control bus
Regulator control
IN select from MCU
Data & control
32 kHz
PURX
Regulators
Line in
Stereo out
Flash
Vbat
Serial data FBUS
Bottom connector
XEAR from CMT
XMIC to CMT
Charger to CMT
BO-BO connector
LCD
LED
MIC
EAR

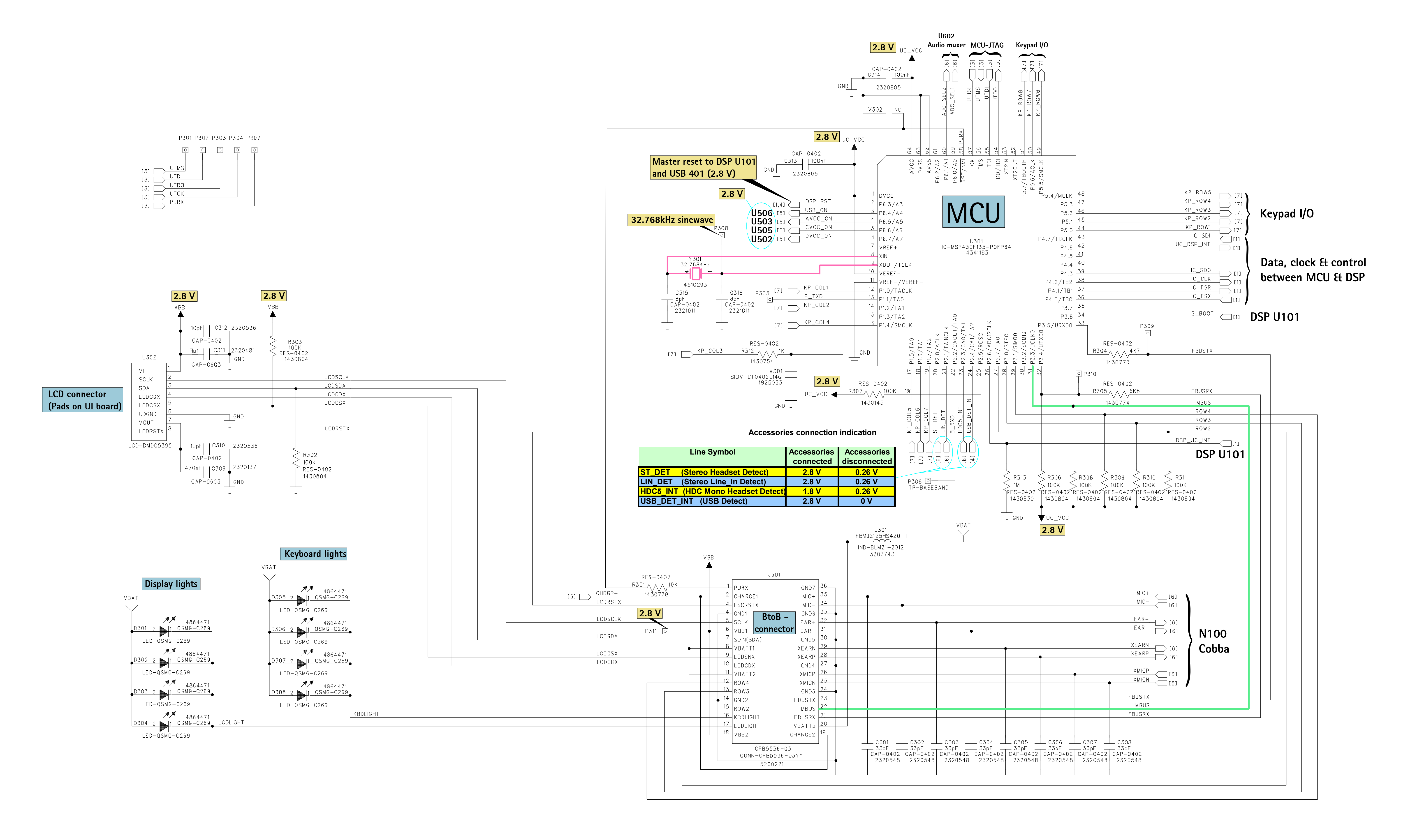
NOKIA	CONFIDENTIAL		2(11)
Customer Care Europe & Africa	Audio schematic	Version 1.0 Approved	
SCCE Training Group	NPM-5 Maverick	(PCB) Version Mu4	
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Audio Routing

	ADC_SEL1	ADC_SEL2
Line in	0 V	0 V
FMR Source	2.7 V	0 V
Phone Source	0 V	2.7 V
Invalid	2.7 V	2.7 V

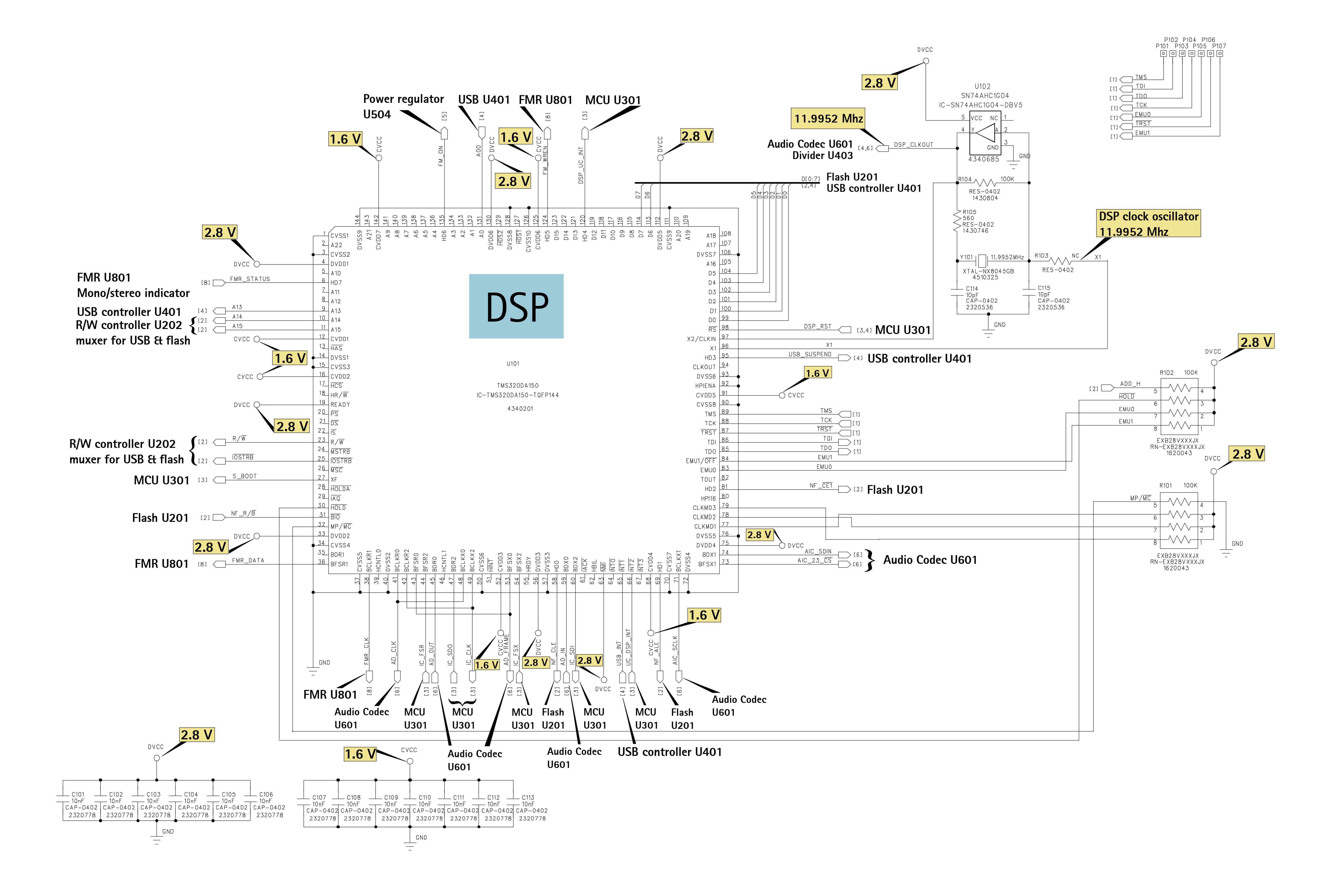
 | Modified : 12.02.2002

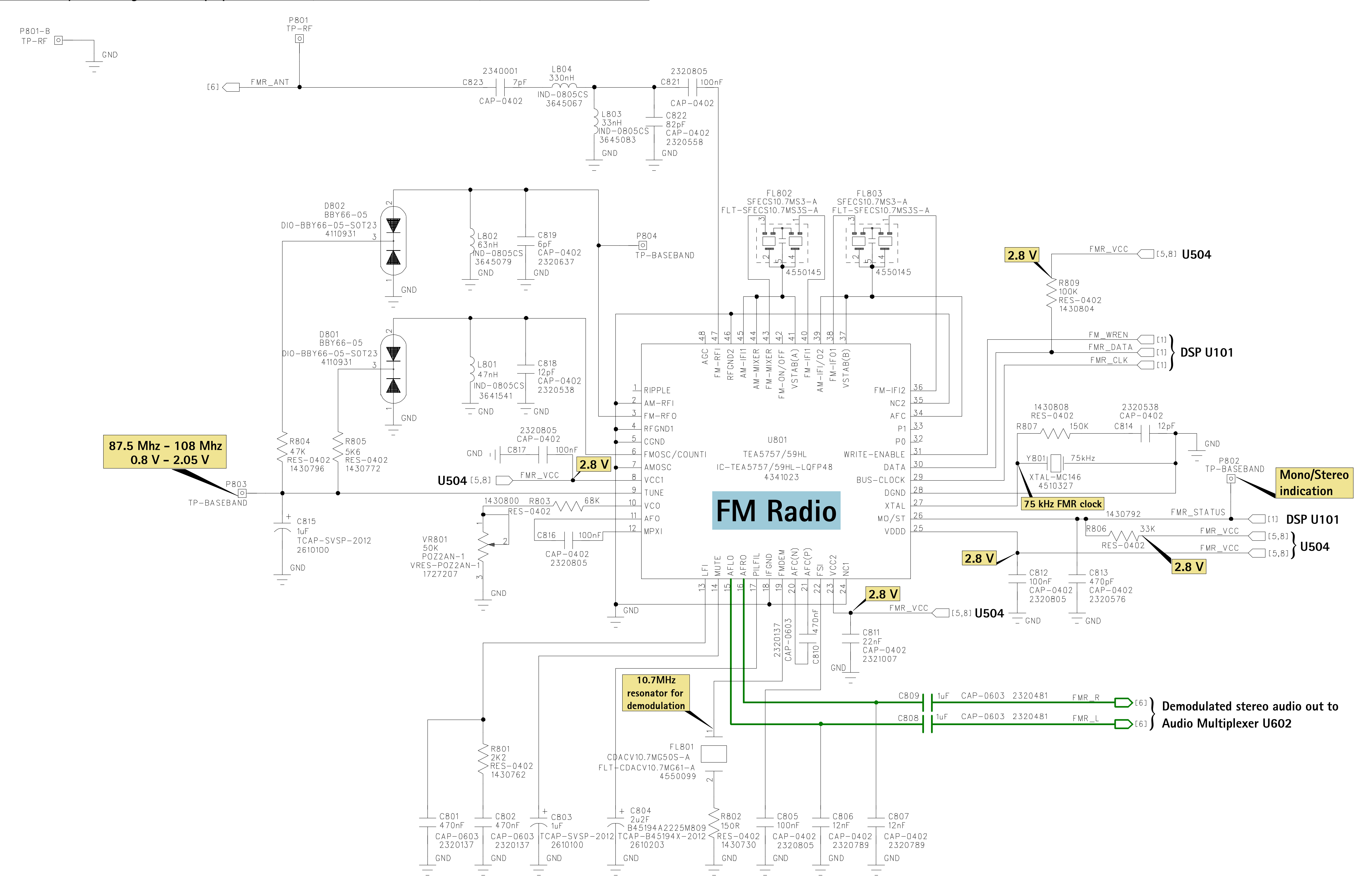


Accessories connection indication

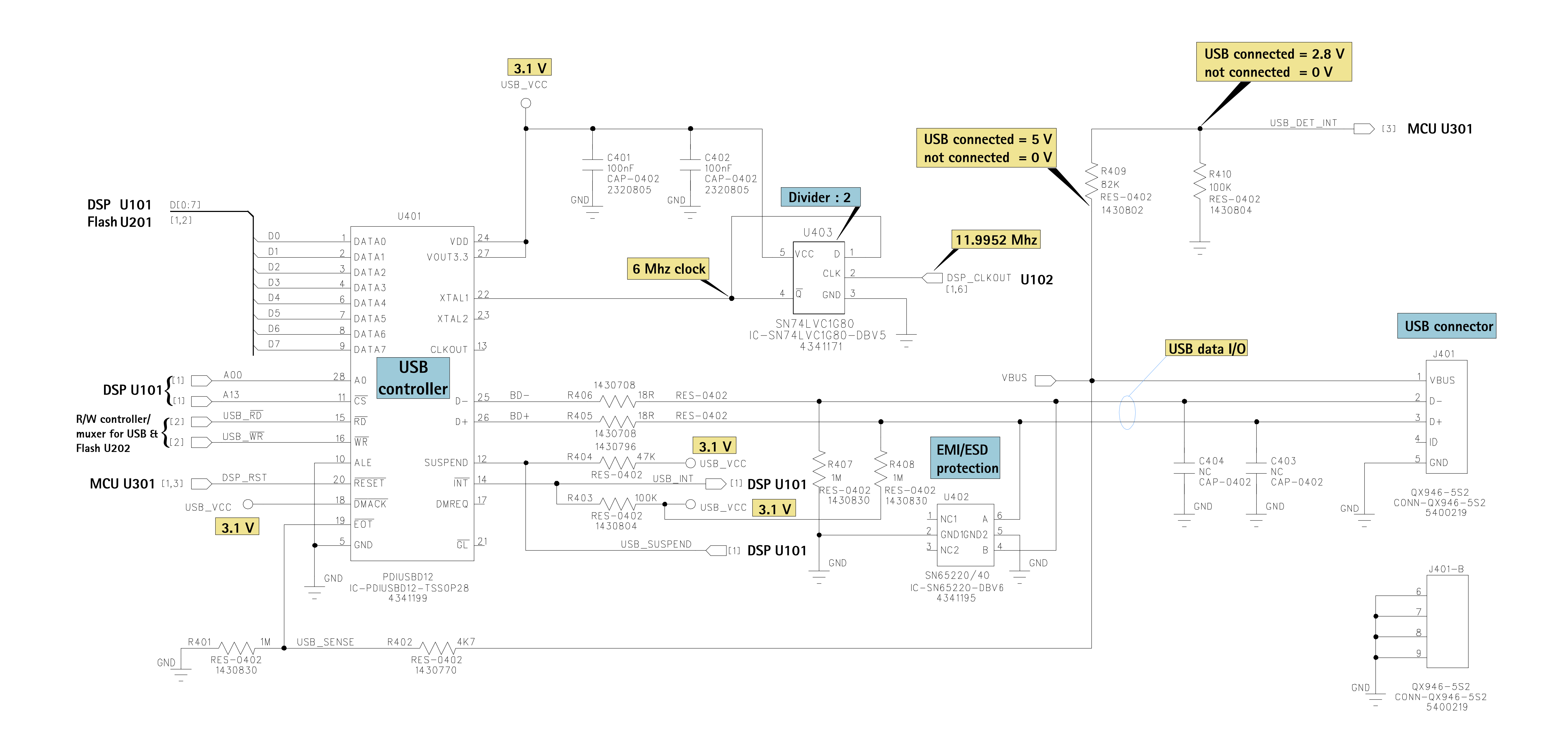
Line Symbol	Accessories connected	Accessories disconnected
ST_DET (Stereo Headset Detect)	2.8 V	0.26 V
LIN_DET (Stereo Line_In Detect)	2.8 V	0.26 V
HDC5_INT (HDC Mono Headset Detect)	1.8 V	0.26 V
USB_DET_INT (USB Detect)	2.8 V	0 V

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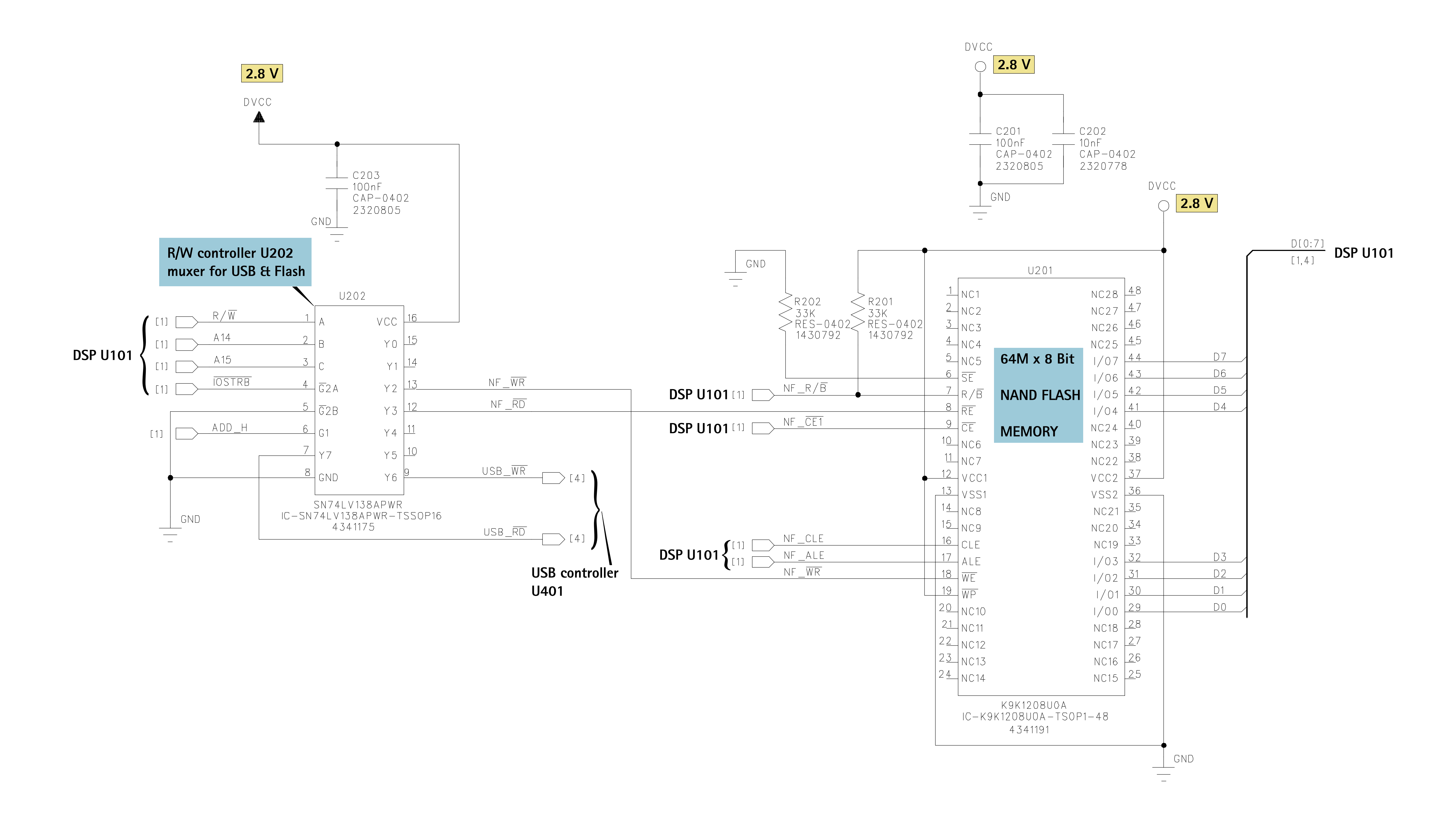




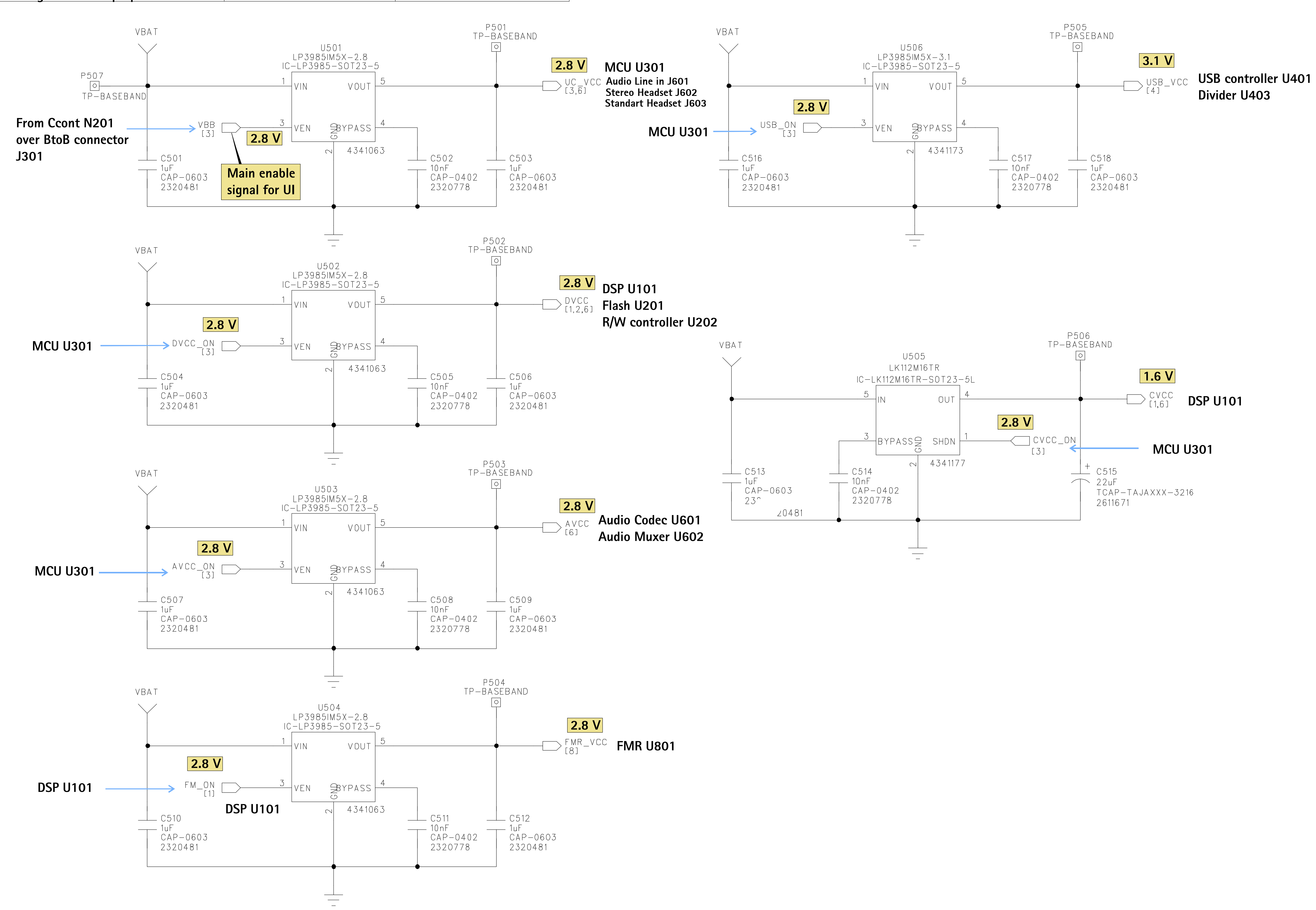
FM Radio
U801
TEA5757/59HL
IC-TEA5757/59HL-LQFP48
4341023
87.5 Mhz - 108 Mhz
0.8 V - 2.05 V
2.8 V
U504
DSP U101
75 kHz FMR clock
Mono/Stereo indication
10.7MHz resonator for demodulation
Demodulated stereo audio out to Audio Multiplexer U602
FMR_ANT
FMR_VCC
FMR_WREN
FMR_DATA
FMR_CLK
FMR_STATUS
FMR_R
FMR_L
P801 TP-RF
P801-B TP-RF
P802 TP-BASEBAND
P803 TP-BASEBAND
P804 TP-BASEBAND
D801 BBY66-05
D802 BBY66-05
FL801 CDACV10.7MG50S-A
FL802 SFECS10.7MS3-A
FL803 SFECS10.7MS3-A
Y801 75kHz XTAL-MC146 4510327
VR801 50K



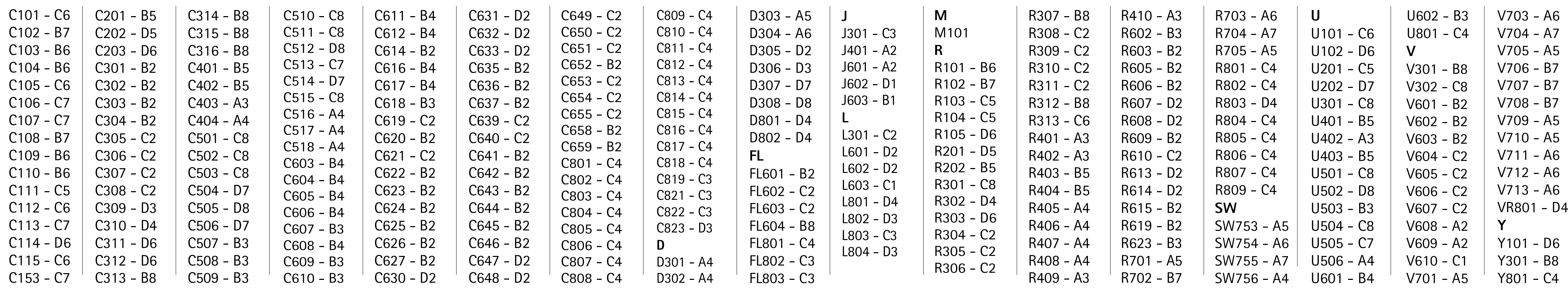
3.1 V
USB_VCC
USB connected = 2.8 V
not connected = 0 V
USB_DET_INT
MCU U301
USB connected = 5 V
not connected = 0 V
C401 100nF CAP-0402 2320805
C402 100nF CAP-0402 2320805
R409 82K RES-0402 1430802
R410 100K RES-0402 1430804
Divider : 2
DSP U101
Flash U201
D[0:7] [1,2]
U401
U403
11.9952 Mhz
6 Mhz clock
DSP_CLKOUT [1,6]
U102
SN74LVC1G80
IC-SN74LVC1G80-DBV5
4341171
USB controller
USB connector
USB data I/O
VBUS
J401
R406 18R RES-0402 1430708
R405 18R RES-0402 1430708
R404 47K RES-0402 1430796
R403 100K RES-0402 1430804
R407 1M RES-0402 1430830
R408 1M RES-0402 1430830
EMI/ESD protection
C404 NC CAP-0402
C403 NC CAP-0402
QX946-5S2
CONN-QX946-5S2
5400219
R/W controller/
muxer for USB &
Flash U202
USB_RD
USB_WR
MCU U301
DSP_RST
USB_INT
DSP U101
USB_SUSPEND
U402
SN65220/40
IC-SN65220-DBV6
4341195
PDIUSBD12
IC-PDIUSBD12-TSSOP28
4341199
R401 1M RES-0402 1430830
USB_SENSE
R402 4K7 RES-0402 1430770
J401-B
GND



2.8 V
DVCC
C203 100nF CAP-0402 2320805
GND
R/W controller U202
muxer for USB & Flash
U202
DSP U101
R/W
A14
A15
IOSTRB
ADD_H
VCC
SN74LV138APWR
IC-SN74LV138APWR-TSSOP16
4341175
NF_WR
NF_RD
USB_WR
USB_RD
USB controller
U401
C201 100nF CAP-0402 2320805
C202 10nF CAP-0402 2320778
R202 33K RES-0402 1430792
R201 33K RES-0402 1430792
U201
64M x 8 Bit
NAND FLASH
MEMORY
NF_R/B
NF_CE1
NF_CLE
NF_ALE
K9K1208U0A
IC-K9K1208U0A-TSOP1-48
4341191
D[0:7]



VBAT
P507
TP-BASEBAND
U501
LP3985IM5X-2.8
IC-LP3985-SOT23-5
VIN
VOUT
VEN
BYPASS
GND
4341063
P501
TP-BASEBAND
2.8 V
UC_VCC [3,6]
MCU U301
Audio Line in J601
Stereo Headset J602
Standart Headset J603
From Ccont N201 over BtoB connector J301
VBB [3]
2.8 V
Main enable signal for UI
C501 1uF CAP-0603 2320481
C502 10nF CAP-0402 2320778
C503 1uF CAP-0603 2320481
U506
LP3985IM5X-3.1
IC-LP3985-SOT23-5
4341173
P505
TP-BASEBAND
3.1 V
USB_VCC [4]
USB controller U401
Divider U403
2.8 V
MCU U301
USB_ON [3]
C516 1uF CAP-0603 2320481
C517 10nF CAP-0402 2320778
C518 1uF CAP-0603 2320481
U502
LP3985IM5X-2.8
IC-LP3985-SOT23-5
P502
TP-BASEBAND
2.8 V
DVCC [1,2,6]
DSP U101
Flash U201
R/W controller U202
MCU U301
DVCC_ON [3]
C504 1uF CAP-0603 2320481
C505 10nF CAP-0402 2320778
C506 1uF CAP-0603 2320481
U505
LK112M16TR
IC-LK112M16TR-SOT23-5L
IN
OUT
BYPASS
SHDN
4341177
P506
TP-BASEBAND
1.6 V
CVCC [1,6]
DSP U101
2.8 V
CVCC_ON [3]
MCU U301
C513 1uF CAP-0603
C514 10nF CAP-0402 2320778
C515 22uF TCAP-TAJAXXX-3216 2611671
U503
LP3985IM5X-2.8
IC-LP3985-SOT23-5
P503
TP-BASEBAND
2.8 V
AVCC [6]
Audio Codec U601
Audio Muxer U602
MCU U301
AVCC_ON [3]
C507 1uF CAP-0603 2320481
C508 10nF CAP-0402 2320778
C509 1uF CAP-0603 2320481
U504
LP3985IM5X-2.8
IC-LP3985-SOT23-5
P504
TP-BASEBAND
2.8 V
FMR_VCC [8]
FMR U801
DSP U101
FM_ON [1]
DSP U101
C510 1uF CAP-0603 2320481
C511 10nF CAP-0402 2320778
C512 1uF CAP-0603 2320481



C101 - C6
C102 - B7
C103 - B6
C104 - B6
C105 - C6
C106 - C7
C107 - C7
C108 - B7
C109 - B6
C110 - B6
C111 - C5
C112 - C6
C113 - C7
C114 - D6
C115 - C6
C153 - C7

C201 - B5
C202 - D5
C203 - D6
C301 - B2
C302 - B2
C303 - B2
C304 - B2
C305 - C2
C306 - C2
C307 - C2
C308 - C2
C309 - D3
C310 - D4
C311 - D6
C312 - D6
C313 - B8

C314 - B8
C315 - B8
C316 - B8
C401 - B5
C402 - B5
C403 - A3
C404 - A4
C501 - C8
C502 - C8
C503 - C8
C504 - D7
C505 - D8
C506 - D7
C507 - B3
C508 - B3
C509 - B3

C510 - C8
C511 - C8
C512 - D8
C513 - C7
C514 - D7
C515 - C8
C516 - A4
C517 - A4
C518 - A4
C603 - B4
C604 - B4
C605 - B4
C606 - B4
C607 - B3
C608 - B4
C609 - B3
C610 - B3

C611 - B4
C612 - B4
C614 - B2
C616 - B4
C617 - B4
C618 - B3
C619 - C2
C620 - B2
C621 - C2
C622 - B2
C623 - B2
C624 - B2
C625 - B2
C626 - B2
C627 - B2
C630 - D2

C631 - D2
C632 - D2
C633 - D2
C635 - B2
C636 - B2
C637 - B2
C639 - C2
C640 - C2
C641 - B2
C642 - B2
C643 - B2
C644 - B2
C645 - B2
C646 - B2
C647 - D2
C648 - D2

C649 - C2
C650 - C2
C651 - C2
C652 - B2
C653 - C2
C654 - C2
C655 - C2
C658 - B2
C659 - B2
C801 - C4
C802 - C4
C803 - C4
C804 - C4
C805 - C4
C806 - C4
C807 - C4
C808 - C4

C809 - C4
C810 - C4
C811 - C4
C812 - C4
C813 - C4
C814 - C4
C815 - C4
C816 - C4
C817 - C4
C818 - C4
C819 - C3
C821 - C3
C822 - C3
C823 - D3
D
D301 - A4
D302 - A4

D303 - A5
D304 - A6
D305 - D2
D306 - D3
D307 - D7
D308 - D8
D801 - D4
D802 - D4
FL
FL601 - B2
FL602 - C2
FL603 - C2
FL604 - B8
FL801 - C4
FL802 - C3
FL803 - C3

J
J301 - C3
J401 - A2
J601 - A2
J602 - D1
J603 - B1
L
L301 - C2
L601 - D2
L602 - D2
L603 - C1
L801 - D4
L802 - D3
L803 - C3
L804 - D3

M
M101
R
R101 - B6
R102 - B7
R103 - C5
R104 - C5
R105 - D6
R201 - D5
R202 - B5
R301 - C8
R302 - D4
R303 - D6
R304 - C2
R305 - C2
R306 - C2

R307 - B8
R308 - C2
R309 - C2
R310 - C2
R311 - C2
R312 - B8
R313 - C6
R401 - A3
R402 - A3
R403 - B5
R404 - B5
R405 - A4
R406 - A4
R407 - A4
R408 - A4
R409 - A3

R410 - A3
R602 - B3
R603 - B2
R605 - B2
R606 - B2
R607 - D2
R608 - D2
R609 - B2
R610 - C2
R613 - D2
R614 - D2
R615 - B2
R619 - B2
R623 - B3
R701 - A5
R702 - B7

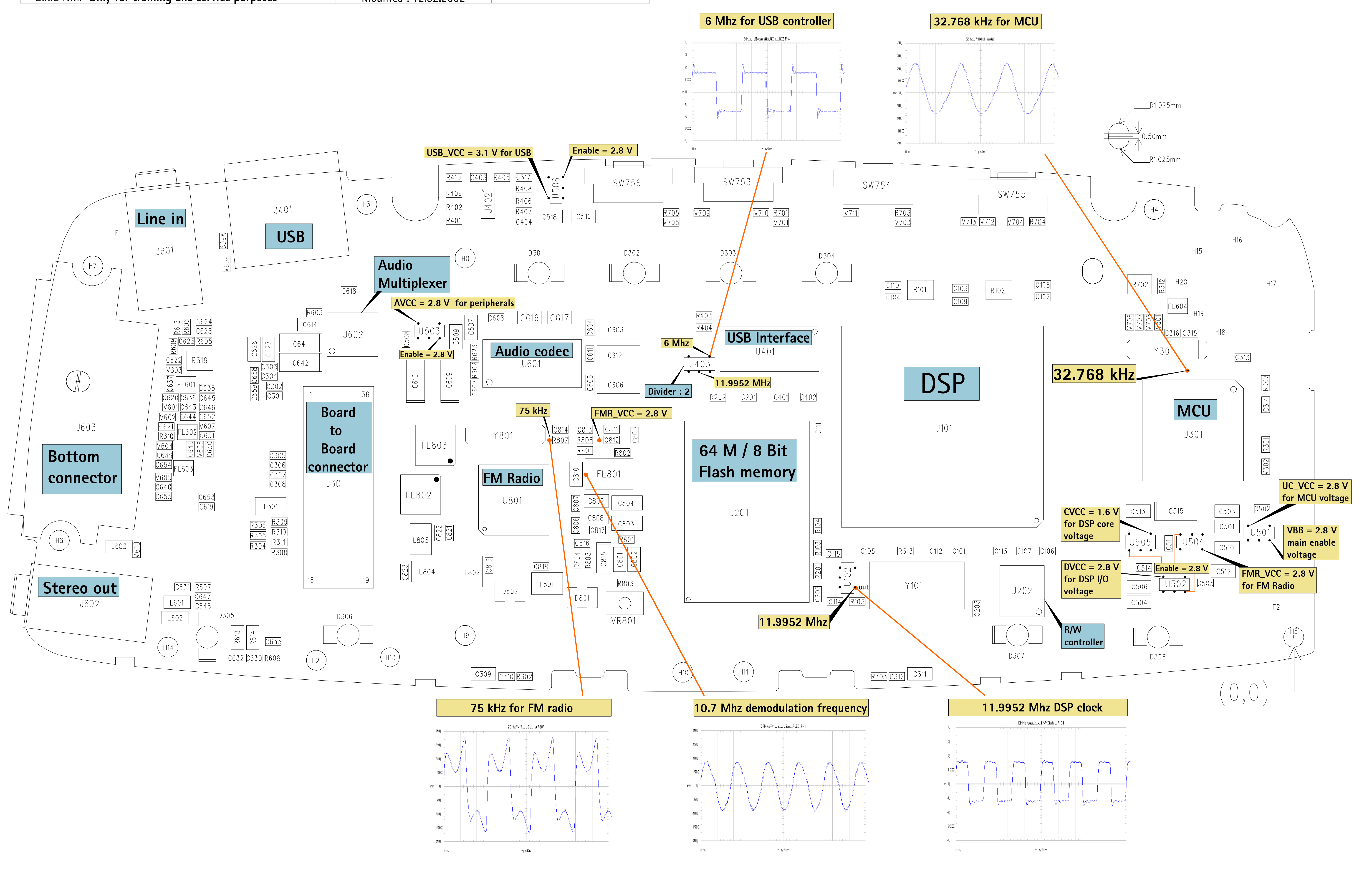
R703 - A6
R704 - A7
R705 - A5
R801 - C4
R802 - C4
R803 - D4
R804 - C4
R805 - C4
R806 - C4
R807 - C4
R809 - C4
SW
SW753 - A5
SW754 - A6
SW755 - A7
SW756 - A4

U
U101 - C6
U102 - D6
U201 - C5
U202 - D7
U301 - C8
U401 - B5
U402 - A3
U403 - B5
U501 - C8
U502 - D8
U503 - B3
U504 - C8
U505 - C7
U506 - A4
U601 - B4

U602 - B3
U801 - C4
V
V301 - B8
V302 - C8
V601 - B2
V602 - B2
V603 - B2
V604 - C2
V605 - C2
V606 - C2
V607 - C2
V608 - A2
V609 - A2
V610 - C1
V701 - A5

V703 - A6
V704 - A7
V705 - A5
V706 - B7
V707 - B7
V708 - B7
V709 - A5
V710 - A5
V711 - A6
V712 - A6
V713 - A6
VR801 - D4
Y
Y101 - D6
Y301 - B8
Y801 - C4

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